

```
Sequence 5, Appli  
Sequence 6, Appli  
Sequence 480, APP  
Sequence 13433, A  
Sequence 2472, AP  
Sequence 246, APP  
Sequence 42270, A  
Sequence 44019, A  
Sequence 4, Appli  
Sequence 18277, A  
Sequence 1, Appli  
Sequence 1, Appli  
Sequence 1, Appli  
Sequence 1, Appli  
Sequence 5, Appli  
Sequence 8, Appli  
Sequence 2, Appli  
Sequence 2, Appli  
2; Length 174;  
-06; Indels 0; Gaps 0;
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Db 103 IGLHDPSHGTLPNGS 117

RESULT 2
US-08-709-662-2

Sequence 2, Application US/08709662

GENERAL INFORMATION:
 Patent No. 5840531
 APPLICANT: Vinik, Aaron I.
 APPLICANT: Pittenger, Gary L.
 APPLICANT: Rafaeloff, Ronit
 APPLICANT: Rosenthal, Lawrence
 APPLICANT: Duguid, William P.
 TITLE OF INVENTION: INSAP PROTEIN INVOLVED IN PANCREATIC ISLET NEGENESIS
 NUMBER OF SEQUENCES: 7
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Banner & Witcoff, Ltd.
 STREET: 1001 G Street, N.W.
 CITY: Washington
 STATE: D.C.
 COUNTY: US
 ZIP: 20001-4597

COMPUTER READABLE FORM:
 MEDIUM TYPE: FLOPPY disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FastaSeq for Windows Version 2.0

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/909,725
 FILING DATE: 12-AUG-1997

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/441,096
 FILING DATE: 30-OCT-1995

ATTORNEY/AGENT INFORMATION:
 NAME: Kagan, Sarah A.

REGISTRATION NUMBER: 32,145
 REFERENCE/DOCKET NUMBER: 0570.05173

TELECOMMUNICATION INFORMATION:
 TELEPHONE: 202-508-9100
 TELEFAX: 202-508-9299

TELEPHONE: 97430 RMB UT
 TELEFAX: 97430 RMB UT

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:
 LENGTH: 175 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein

US-08-909-725-6

RESULT 4
US-07-778-156-7

Query Match Sequence 7, Application US/07778156
 Patent No. 543169

General Information:
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Dy 1 IGLHDPSHGTLPNGS 15
 Db 104 IGLHDPSHGTLPNGS 118

RESULT 4
US-07-778-156-7

Query Match Sequence 7, Application US/07778156
 Patent No. 543169

General Information:
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Dy 1 IGLHDPSHGTLPNGS 15
 Db 104 IGLHDPSHGTLPNGS 118

RESULT 4
US-07-778-156-7

Query Match Sequence 7, Application US/07778156
 Patent No. 543169

General Information:
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Dy 1 IGLHDPSHGTLPNGS 15
 Db 104 IGLHDPSHGTLPNGS 118

RESULT 3
US-08-909-725-6

Sequence 6, Application US/08909725

GENERAL INFORMATION:
 Patent No. 5804421
 APPLICANT: Vinik, Aaron I.
 APPLICANT: Pittenger, Gary L.
 APPLICANT: Rafaeloff, Ronit
 APPLICANT: Barlow, Scott
 TITLE OF INVENTION: HIGH LEVEL EXPRESSION OF INSAP IN BACTERIAL AND EUKARYOTIC CELLS
 NUMBER OF SEQUENCES: 6
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Banner & Witcoff, Ltd.
 STREET: 1001 G Street, N.W.
 CITY: Washington
 STATE: DC

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/07/778,156
 FILING DATE: 19-11-219
 CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:
 NAME: Obli, No. 543169man F.
 REGISTRATION NUMBER: 24,618

REFERENCE/DOCKET NUMBER: 354-012-0 PCT

GenCore version 5.1.6
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OM protein - protein search, using sw mode1
Run on: December 10, 2004, 11:47:11 ; Search time 278.698 Seconds
55.659 Million cell updates/sec

Title: US-10-036-418-4

Perfect score: 84

Sequence: 1 QKSGFQKWRDENCE 14

Scoring table: BLOSUM62

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Total number of hits satisfying chosen parameters: 6730630

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Pending Patents AA Main:*

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- 3: /cgn2_6/pctdata/1/paa/US07_COMB_pep:*
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- 14: /cgn2_6/pctdata/1/paa/US090_COMB_pep:*
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- 27: /cgn2_6/pctdata/1/paa/US102_COMB_pep:*
- 28: /cgn2_6/pctdata/1/paa/US103_COMB_pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
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2	84	100.0	14	US-10-036-418-4
3	84	100.0	14	US-10-036-418-4
4	84	100.0	14	US-10-036-418-4
5	84	100.0	14	US-10-036-418-4
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7	84	100.0	14	US-10-036-418-4
8	84	100.0	14	US-10-036-418-4
9	84	100.0	14	US-10-036-418-4
10	84	100.0	14	US-10-036-418-4
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12	84	100.0	14	US-10-036-418-4
13	84	100.0	14	US-10-036-418-4
14	84	100.0	14	US-10-036-418-4
15	84	100.0	14	US-10-036-418-4
16	84	100.0	14	US-10-036-418-4
17	84	100.0	14	US-10-036-418-4
18	84	100.0	14	US-10-036-418-4
19	84	100.0	14	US-10-036-418-4
20	84	100.0	14	US-10-036-418-4
21	84	100.0	14	US-10-036-418-4
22	84	100.0	14	US-10-036-418-4
23	84	100.0	14	US-10-036-418-4
24	84	100.0	14	US-10-036-418-4
25	84	100.0	14	US-10-036-418-4
26	84	100.0	14	US-10-036-418-4
27	84	100.0	14	US-10-036-418-4
28	84	100.0	14	US-10-036-418-4
29	84	100.0	14	US-10-036-418-4
30	84	100.0	14	US-10-036-418-4
31	84	100.0	14	US-10-036-418-4
32	84	100.0	14	US-10-036-418-4
33	84	100.0	14	US-10-036-418-4
34	84	100.0	14	US-10-036-418-4
35	84	100.0	14	US-10-036-418-4
36	84	100.0	14	US-10-036-418-4

RESULT 1

PCT-US03-06221-3

; Sequence 3 : Application PC/TUS03/06221

; GENERAL INFORMATION:

; APPLICANT: GMP Endotherapeutics, Inc.

; APPLICANT: Vink, Aaron T.

; APPLICANT: Taylor-Fishwick, David A.

; TITLE OF INVENTION: Assay for Anti-LINGAP Antibodies

; FILE REFERENCE: 905#1\$ / VB

; CURRENT APPLICATION NUMBER: PCT/US03/06221

; CURRENT FILING DATE: 2003-02-28

; PRIOR APPLICATION NUMBER: U.S. 60/3661,040

; PRIOR FILING DATE: 2003-03-01

; NUMBER OF SEQ ID NOS: 4

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO: 3

; LENGTH: 14

; TYPE: PRT

; ORGANISM: hamster sp.

All one length 14

like spec 12-20 kDa

Query Match 100.0%; Score 84; DB 1; Length 14;
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 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 OKSGFQKWRDENCE 14
 Db 1 OKSGFQKWRDENCE 14

RESULT 2 US-0-036-418-4

; Sequence 4, Application US/10036418
 ; GENERAL INFORMATION:
 ; APPLICANT: Vinik, Aaron
 ; APPLICANT: Taylor-Fishwick, David
 ; TITLE OF INVENTION: INGAP Displacement Assay
 ; CURRENT APPLICATION NUMBER: US/10/036,418
 ; CURRENT FILING DATE: 2002-01-07
 ; PRIOR APPLICATION NUMBER: 60/260,210
 ; NUMBER OF SEQ ID NOS: 27
 ; SOFTWARE: FastSBQ for Windows Version 4.0
 ; SEQ ID NO 4
 ; LENGTH: 14
 ; TYPE: PRT
 ; ORGANISM: cricetusulus
 ; US-10-036-418-4

Query Match 100.0%; Score 84; DB 26; Length 14;
 Best Local Similarity 100.0%; Pred. No. 1.5e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 OKSGGQKWRDENCE 14
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RESULT 3 US-10-376-046-3

; Sequence 3, Application US/10376046
 ; GENERAL INFORMATION:
 ; APPLICANT: GMP Endotherapeutics, Inc.
 ; APPLICANT: Vinik, Aaron T.
 ; APPLICANT: Taylor-Fishwick, David A.
 ; TITLE OF INVENTION: Assay for Anti-INGAP Antibodies
 ; FILE REFERENCE: 905#15
 ; CURRENT APPLICATION NUMBER: US/10/376,046
 ; CURRENT FILING DATE: 2003-02-27
 ; PRIOR APPLICATION NUMBER: U.S. 60/361,040
 ; PRIOR FILING DATE: 2002-03-01
 ; NUMBER OF SEQ ID NOS: 4
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 3
 ; LENGTH: 14
 ; TYPE: PRT
 ; ORGANISM: hamster sp.
 ; US-10-376-046-3

Query Match 100.0%; Score 84; DB 29; Length 14;
 Best Local Similarity 100.0%; Pred. No. 1.5e-06;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 OKSGPQKWRDENCE 14
 Db 1 OKSGPQKWRDENCE 14

RESULT 4 US-10-27637-23

; Sequence 23, Application PC/TUS0227637
 ; GENERAL INFORMATION:
 ; APPLICANT: Prior, Christopher P.
 ; TITLE OF INVENTION: Modified Transferrin Fusion Proteins
 ; FILE REFERENCE: 54710-5001-WO

Query Match 100.0%; Score 84; DB 1; Length 145;
 Best Local Similarity 100.0%; Pred. No. 1.6e-05;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 OKSGFQKWRDENCE 14
 Db 121 OKSGFQKWRDENCE 134

RESULT 5 PCT-US03-26779-23

; Sequence 23, Application PC/TUS0326779
 ; GENERAL INFORMATION:
 ; APPLICANT: Prior, Christopher P.
 ; APPLICANT: Turner, Andrew J.
 ; APPLICANT: Sadeghi, Homayoun
 ; TITLE OF INVENTION: Transferrin Fusion Protein Libraries
 ; FILE REFERENCE: 054710-5007-WO

Query Match 100.0%; Score 84; DB 1; Length 145;
 Best Local Similarity 100.0%; Pred. No. 1.6e-05;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 OKSGFQKWRDENCE 14
 Db 121 OKSGFQKWRDENCE 134

RESULT 6 US-10-231-494-23

; Sequence 23, Application US/10231494
 ; GENERAL INFORMATION:
 ; APPLICANT: Prior, Christopher P.
 ; TITLE OF INVENTION: Modified Transferrin Fusion Proteins
 ; FILE REFERENCE: 54710-5001-US

GenCore version 5.1.6
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OM protein - protein search, using sw mode.
Run on: December 10, 2004, 11:57:22 ; Search time 81.7209 Seconds

(without alignments) updates/sec
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Title: US-10-036-418-3
Perfect score: 71
Sequence: 1 IAADRGYCAVLSQLK 14
Scoring table: BLOSUM62
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Searched: 1585576 seqs, 357178320 residues
Total number of hits satisfying chosen parameters: 1585576
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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16: /cgn2_6/ptodata/1/pubpaa/us10D_PUBCOMB.pep:/*
17: /cgn2_6/ptodata/1/pubpaa/us10_EUROPEAN_PUB.pep:/*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	71	100.0	14	US-10-036-418-3
2	71	100.0	14	US-10-376-046-4
3	71	100.0	145	US-10-231-494-23
4	71	100.0	148	US-10-231-494-21
5	71	100.0	149	US-10-231-363-3
6	71	100.0	174	US-10-231-494-17
7	71	100.0	174	US-10-469-314-2
8	71	100.0	175	US-10-476-041-2
9	71	100.0	175	US-10-231-494-19
10	71	100.0	175	US-10-231-733-1
11	45	63.4	78	US-10-425-115-20125
12	43	60.6	70	US-10-264-480-25
13	43	60.6	70	US-10-264-480-26

RESULT 1
US-10-036-418-3
; Sequence 3, Application US/10036418
; Publication No.20020127624A1
; GENERAL INFORMATION:
; APPLICANT: Vinik, Aaron
; ATTORNEY: Taylor-Fishwick, David
; TITLE OF INVENTION: INGAP Displacement Assay
; FILE REFERENCE: 005126 00009
; CURRENT APPLICATION NUMBER: US/10/036,418
; CURRENT FILING DATE: 2002-01-07
; PRIOR APPLICATION NUMBER: 60/260,210
; PRIOR FILING DATE: 2000-01-09
; NUMBER OF SEQ ID NOS: 27
; SEQ ID NO 3 ; SOFTWARE: FastSEQ for Windows Version 4.0
; LENGTH: 14
; TYPE: PRT
; ORGANISM: Cricetulus

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Matches 14; Conservative 100.0%; Pred. No. 1.5e-05; Indels 0; Gaps 0;

QY 1 IAADRGYCAVLSQLK 14
Db 1 IAADRGYCAVLSQLK 14
Print

RESULT 2
US-10-376-046-4
; Sequence 4, Application US/10376046
; Sequence 1, Appli
; Publication No. US/030166031A1
; GENERAL INFORMATION:
; APPLICANT: GMP Endotherapeutics, Inc.

Applicatn No. 10376046

145.0

12-20.60

Mr. SULLIVAN

```

; APPLICANT: Vinik, Aaron I.
; APPLICANT: Taylor-Fishwick, David A.
; TITLE OF INVENTION: Assay for Anti-INGAP Antibodies
; CURRENT APPLICATION NUMBER: US/10/376,046
; CURRENT FILING DATE: 2003-03-27
; PRIOR APPLICATION NUMBER: U.S. 60/361,040
; PRIOR FILING DATE: 2002-03-01
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 4
; LENGTH: 14
; TYPE: PRT
; ORGANISM: hamster sp.
US-10-376-046-4

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Best Local Similarity 100.0%; Pred. No. 5e-05; Mismatches 0; Indels 0; Gaps 0;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 3
US-10-231-494-23
; Sequence 23, Application US/10231494
; Publication No. US20040023334A1
; GENERAL INFORMATION:
; APPLICANT: Prior, Christopher P.
; TITLE OF INVENTION: Modified Transferrin Fusion Proteins
; CURRENT APPLICATION NUMBER: US/10/231,494
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: US 60/315,745
; PRIOR FILING DATE: 2001-08-30
; PRIOR APPLICATION NUMBER: US 60/334,059
; PRIOR FILING DATE: 2001-11-30
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 23
LENGTH: 145
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: INGAP
OTHER INFORMATION: Sequences for fusion Proteins
OTHER INFORMATION: INGAP
US-10-231-494-23

Query Match 100.0%; Score 1; DB 15; Length 145;
Best Local Similarity 100.0%; Pred. No. 0.00015; Mismatches 0; Indels 0; Gaps 0;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IAADRGYCAVLSQLK 14
Db 1 IAADRGYCAVLSQLK 14

RESULT 4
US-10-231-494-21
; Sequence 21, Application US/10231494
; Publication No. US20040023334A1
; GENERAL INFORMATION:
; APPLICANT: Prior, Christopher P.
; TITLE OF INVENTION: Modified Transferrin Fusion Proteins
; CURRENT APPLICATION NUMBER: US/10/231,494
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: US 60/315,745
; PRIOR FILING DATE: 2001-08-30
; PRIOR APPLICATION NUMBER: US 60/334,059
; PRIOR FILING DATE: 2001-11-30
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 17
LENGTH: 145
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: INGAP
OTHER INFORMATION: sequences for fusion proteins
US-10-231-494-21

Query Match 100.0%; Score 71; DB 15; Length 148;
Best Local Similarity 100.0%; Pred. No. 0.00015; Mismatches 0; Indels 0; Gaps 0;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IAADRGYCAVLSQLK 14
Db 1 IAADRGYCAVLSQLK 14

RESULT 5
US-10-421-363-3
; Sequence 3, Application US/10421363
; Publication No. US20040018623A1
; GENERAL INFORMATION:
; APPLICANT: Rosenberg, Lawrence
; TITLE OF INVENTION: MEDIUM FOR PREPARING DEDIFFERENTIATED
; CURRENT APPLICATION NUMBER: CELLS
; FILE REFERENCE: 701826-05621-CIP
; CURRENT FILING DATE: 2003-04-23
; PRIOR APPLICATION NUMBER: US/10/421,363
; PRIOR FILING DATE: 2002-04-25
; PRIOR APPLICATION NUMBER: PCT/CA00/01284
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US 60/162,137
; PRIOR FILING DATE: 1999-10-29
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: FastSeq for Windows version 4.0
; SEQ ID NO 3
; LENGTH: 174
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: INGAP translated Protein
US-10-421-363-3

Query Match 100.0%; Score 71; DB 15; Length 174;
Best Local Similarity 100.0%; Pred. No. 0.00018; Mismatches 0; Indels 0; Gaps 0;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IAADRGYCAVLSQLK 14
Db 1 IAADRGYCAVLSQLK 151

RESULT 6
US-10-231-494-17
; Sequence 17, Application US/10231494
; Publication No. US20040023334A1
; GENERAL INFORMATION:
; APPLICANT: Prior, Christopher P.
; TITLE OF INVENTION: Modified Transferrin Fusion Proteins
; FILE REFERENCE: 54110-5001-US
; CURRENT APPLICATION NUMBER: US/10/231,494
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: US 60/315,745
; PRIOR FILING DATE: 2001-08-30
; PRIOR APPLICATION NUMBER: US 60/334,059
; PRIOR FILING DATE: 2001-11-30
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 17
LENGTH: 145
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: INGAP
OTHER INFORMATION: sequences for fusion proteins
US-10-231-494-17

Query Match 100.0%; Score 71; DB 15; Length 145;
Best Local Similarity 100.0%; Pred. No. 0.00018; Mismatches 0; Indels 0; Gaps 0;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 IAADRGYCAVLSQLK 14
Db 1 IAADRGYCAVLSQLK 151

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Copyright (c) 1993 - 2004 Compugen ltd.	GenCore version 5.1.6			
Run on:	December 15, 2004, 14:37:36 ; Search time 154 Seconds (without alignments) 48.918 Million cell updates/sec			
Title:	US-10-036-418-1			
Perfect score:	111			
Sequence:	1 FLSWVEGEBESQKKLPPSSRITC 21			
Scoring table:	BLOSUM62			
Gapop 10.0 , Gapext 0.5				
Searched:	2002273 seqs, 358729299 residues			
Total number of hits satisfying chosen parameters:	2002273			
Minimum DB seq length:	0			
Maximum DB seq length:	200000000			
Post-processing:	Minimum Match 0% Maximum Match 100%			
Database :	Listing first 45 summaries			
A_Geneseq_23seq04:*				
1: geneseqP1980s:*				
2: geneseqP1990s:*				
3: geneseqP2000s:*				
4: geneseqP2001s:*				
5: geneseqP2002s:*				
6: geneseqP2003s:*				
7: geneseqP2003s:*				
8: geneseqP2004s:*				
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.				
SUMMARIES				
Result No.	Score	Query Length	DB ID	Description
1	111	100.0	21 5 ABB79542	Abb79542 Hamster i
2	111	100.0	171 7 ADH2043	Adh2043 Golden ha
3	111	100.0	174 2 AAR98525	Aar98525 Hamster i
4	111	100.0	174 5 ABB79915	Abb79915 Hamster i
5	111	100.0	174 6 ABR72830	Abp72830 Human ING
6	111	100.0	174 8 ADL70746	Adl70746 Human ING
7	111	100.0	175 2 AEW64790	AEW64790 INGAP pro
8	111	100.0	175 6 ABP7831	Abp7831 Human ING
9	111	100.0	175 7 ADC13872	Adc13872 Hamster i
10	111	100.0	175 8 ADL70748	Adl70748 Human ING
11	71	64.0	175 3 AEW95089	AEW95089 Reg-2 pro
12	71	64.0	175 3 AAB18614	Aab18614 Amino aci
13	71	64.0	175 7 ADE83454	Ade83454 Rat prote
14	71	64.0	184 2 AAR14797	Aar14797 Rat pancer
15	68	61.3	121 4 ABBG1887	Abg1887 Novel hum
16	68	61.3	129 6 ABR56770	Abr56770 Human sec
17	68	61.3	129 6 ABR56754	Abr56754 Human sec
18	68	61.3	174 2 ABR1795	Abr1795 Fragment
19	68	61.3	175 2 AAR57117	Aar57117 Human Pan
20	68	61.3	175 2 AAR54098	Aar54098 Mouse Pan
21	68	61.3	175 2 AAW71682	AAw7168 Human Pan
22	68	61.3	175 2 AAY41755	Aay41755 Human PRO
23	68	61.3	175 3 AAB4311	Aab4311 Human PRO
24	68	61.3	175 4 AAU2935	Aau2935 Human PRO
25	61.3		175 5 ABB64876	ABB64876 Human PRO
ALIGNMENTS				
RESULT 1				
ID	ABB79542			
XX	standard; peptide; 21 AA.			
AC	ABB79542;			
XX				
DT	01-OCT-2002 (first entry)			
XX				
DE	Hamster islet neogenesis associated protein (INGAP) immunogen.			
XX				
KW	Islet neogenesis associated protein; INGAP; immunogen; hamster; pancreas; diabetes; immunoassay.			
XX				
OS	Cricetulus sp.			
XX				
PN	WO200256028-A2.			
XX				
PD	18-JUL-2002.			
XX				
PR	08-JAN-2002; 2002WO-US000071.			
XX				
PR	09-JAN-2001; 2001US-0261210P.			
XX				
PR	07-JAN-2002; 2002US-00036418.			
XX				
PA	(GMPE-) GMP ENOTHERAPEUTICS INC.			
XX				
PI	Vinik AI, Taylor-Fishwick D;			
XX				
DR	WPI: 2002-557941/59.			
XX				
PT	Assaying islet neogenesis associated protein (INGAP) for treating diabetes types I and II, comprises determining the amount of labeled INGAP molecule bound to antibodies or to a solid support comprising the bound antibodies.			
XX				
PS	Claim 1; Page 12; 29PP; English.			
XX				
CC	The present sequence is a peptide immunogen corresponding to amino acid residues 20-40 of full-length hamster islet neogenesis associated protein (INGAP). The invention provides methods for assaying INGAP in a test sample. In a competitive binding assay, antibodies which specifically bind to the INGAP immunogen are contacted with a test sample which may contain INGAP protein and a labelled INGAP molecule, e.g. a fusion protein comprising INGAP protein and a marker protein. The amount of labelled INGAP molecule bound to the antibodies is determined. This amount is inversely related to INGAP protein in the test sample. Antibodies raised against different INGAP immunogens (see ABB79543-45) and their subfragments may also be used. They may be monoclonal or			

CC polyclonal, may be bound to a solid support, and do not specifically bind to other portions of the INGAP protein or to other human proteins. The CC method can be used to determine the amount of INGAP e.g. in culture media CC or biological tissues and fluids. The ability to assay INGAP will CC facilitate the full exploitation of this protein for fighting human CC disease, such as diabetes types I and II XX

SEQ Sequence 21 AA; XX

Query	Match	Score	DB	Length
FLSWVEGEBSQKKLUPSRITC	100.0%	111	5	21
FLSWVEGEBSQKKLUPSRITC	100.0%	21		
FLSWVEGEBSQKKLUPSRITC	0	0		
FLSWVEGEBSQKKLUPSRITC	0	0		
FLSWVEGEBSQKKLUPSRITC	21	21		

Best Local Similarity 100.0%; ProdB. No. 1e-09; Mismatches 0; Indels 0; Gaps 0

Matches 21; Conservative 0;

QY 1 FLSWVEGEBSQKKLUPSRITC 21

Db 1 FLSWVEGEBSQKKLUPSRITC 21

RESULT 2 ADH22043

ID ADH22043 standard; peptide; 171 AA.

XX

AC ADH22043;

XX

DT 11-MAR-2004 (first entry)

XX

DR Golden hamster INGAP peptide, SEQ ID NO:840.

XX

KW Fusion protein; human serum albumin; HSA; therapeutic protein; KW shelf-life; in vitro biological activity; in vivo biological activity; metabolic disorder; endocrine disorder; diabetes; type 1; type 2; KW diabetes-related condition; hyperglycemia; neural disorder; neuropathy; KW retinopathy; cardiovascular disorder; heart disease; renal disorder; obesity; glucose level maintenance; weight loss; antidiabetic; cardiant; KW anorectic; ophthalmological; gene therapy; INGAP; golden hamster.

OS Mesocricetus auratus.

XX

PN WO2003059934-A2.

XX

PD 24-JUL-2003.

XX

PR 23-DEC-2002; 2002WO-US0410892.

XX

PR 21-DEC-2001; 2001US-0341811P.

PR 24-JAN-2002; 2002US-0350358P.

PR 26-FEB-2002; 2002US-0359370P.

PR 28-FEB-2002; 2002US-0360000P.

PR 27-MAR-2002; 2002US-0367500P.

PR 08-APR-2002; 2002US-0370227P.

PR 10-MAY-2002; 2002US-0378950P.

PR 24-JUN-2002; 2002US-0390008P.

PR 09-AUG-2002; 2002US-0402131P.

PR 13-AUG-2002; 2002US-0402708P.

PR 18-SEP-2002; 2002US-0411355P.

PR 02-OCT-2002; 2002US-0414984P.

PR 11-CT-2002; 2002US-0417611P.

PR 23-CT-2002; 2002US-042246P.

PR 05-NOV-2002; 2002US-0423623P.

PA (HUMA-) HUMAN GENOME SCI INC.

XX

PT Rosen CA; Hasseltine WA;

XX

DR WPI, 2003-598501/56.

PT New albumin fusion protein, useful for preparing a composition for XX treating diabetes mellitus.

PS Disclosure; SEQ ID NO 840; 1086pp; English.

CC The invention relates to fusion proteins comprising human serum albumin CC (ADH21530) and a therapeutic polypeptide such as a therapeutic protein, CC

CC polyclonal, may be bound to a solid support, and do not specifically bind CC to other portions of the INGAP protein or to other human proteins. The CC method can be used to determine the amount of INGAP e.g. in culture media CC or biological tissues and fluids. The ability to assay INGAP will CC facilitate the full exploitation of this protein for fighting human CC disease, such as diabetes types I and II

XX

SQ Sequence 21 AA:

Query	Match	Score	Length	DB	Best	Local	Similarity	Score	Length	DB
QY	1	100.0%	111	5	100.0%	1	1e-09	0	0	0
Db	1	FLSWWEGEEESQKKLSSRITC	21							
	1	FLSWWEGEEESQKKLSSRITC	21							

antibody or peptide or their variants or fragments. The therapeutic protein may be fused to the N-terminus, the C-terminus or both termini of albumin via a linker. The albumin component of the fusion proteins prolongs the shelf-life and the *in vitro* and *in vivo* biological activity of the proteins compared with those of the corresponding therapeutic proteins on their own. The invention also relates to nucleic acids encoding albumin fusion proteins, vectors and host cells comprising an albumin fusion protein nucleic acid, compositions and kits comprising an albumin fusion protein, the method of extending the shelf-life of a therapeutic protein by fusion with albumin, and the treatment of disease using an albumin fusion protein. The albumin fusion proteins may be used in the treatment of metabolic/endocrine disorders, diabetes and diabetes-related conditions. Specifically the albumin fusion proteins may be used to treat type 1 and type 2 diabetes, hyperglycaemia, neural disorders (especially neuropathy), retinopathy, cardiovascular disorders (especially heart disease), renal disorders and obesity. The proteins may also be used in a method of maintaining a basal glucose level in a patient and in a method for losing weight. The present sequence is